purposes, and that is not labeled or otherwise intended for a specific diagnostic application. It may be either an individual substance, or multiple substances reformulated, which, when combined with or used in conjunction with an appropriate analyte specific reagent (ASR) and other general purpose reagents, is part of a diagnostic test procedure or system constituting a finished in vitro diagnostic (IVD) test. General purpose reagents are appropriate for combining with one or more than one ASR in producing such systems and include labware or disposable constituents of tests; but they do not include laboratory machinery, automated or powered systems. General purpose reagents include cytological preservatives, decalcifying reagents, fixative and adhesives, tissue processing reagents, isotonic solutions and pH buffers. Reagents used in tests for more than one individual chemical substance or ligand are general purpose reagents (e.g., Thermus aquaticus (TAQ) polymsubstrates for enzvme erase. immunoassay (EIA)).

(b) Classification. Class I. The device is exempt from the premarket notification procedures in subpart E of part 807 of this chapter. If the device is not labeled or otherwise represented as sterile, it is exempt from the current good manufacturing practice regulations in part 820 of this chapter, with the exception of \$820.180, with respect to general requirements concerning records, and \$820.198, with respect to complaint files.

[45 FR 60592, Sept. 12, 1980, as amended at 54 FR 25045, June 12, 1989; 62 FR 62260, Nov. 21, 1997]

EFFECTIVE DATE NOTE: At 62 FR 62260, Nov. 21, 1997, §864.4010 was amended by revising paragraph (a), effective Nov. 23, 1998. For the convenience of the user, the text remaining in effect until Nov. 23, 1998, is set forth as follows:

§864.4010 General purpose reagent.

(a) Identification. A general purpose reagent is a chemical reagent that has general laboratory application, that is used to collect, prepare, and examine specimens from the human body for diagnostic histopathology, cytology, and hematology, and that is not labeled or otherwise intended for a specific diagnostic application. General purpose reagents include cytological preservatives, decalcifying reagents, fixatives and adhesives,

tissue processing reagents, isotonic solutions, and pH buffers.

§864.4020 Analyte specific reagents.

(a) Identification. Analyte specific reagents (ASR's) are antibodies, both polyclonal and monoclonal, specific receptor proteins, ligands, nucleic acid sequences, and similar reagents which, through specific binding or chemical reaction with substances in a specimen, are intended for use in a diagnostic application for identification and quantification of an individual chemical substance or ligand in biological specimens. ASR's that otherwise fall within this definition are not within the scope of subpart E of this part when they are sold to:

(1) In vitro diagnostic manufacturers;

or

- (2) Organizations that use the reagents to make tests for purposes other than providing diagnostic information to patients and practitioners, e.g., forensic, academic, research, and other nonclinical laboratories.
- (b) Classification. (1) Class I (general controls). Except as described in paragraphs (b)(2) and (b)(3) of this section, these devices are exempt from the premarket notification requirements in part 807, subpart E of this chapter.
- (2) Class II (special controls/guidance documents), when the analyte is used in blood banking tests that have been classified as class II devices (e.g., certain cytomegalovirus serological and treponema pallidum nontreponemal test reagents). Guidance Documents:
- 1. "Specifications for Immunological Testing for Infectious Disease; Approved Guideline," NCCLS Document I/LA18-A, December 1994.
- 2. "Assessment of the Clinical Accuracy of Laboratory Tests Using Receiver Operating Characteristic (ROC) Plots; Tentative Guideline," NCCLS Document KGP10-T, December 1993.
- 3. "Review Criteria for Assessment of In Vitro Diagnostic Devices for Direct Detection of Mycobacterium spp," FDA, July 6, 1993, and its "Attachment 1," February 28, 1994.
- 4. "Draft Review Criteria for Nucleic Acid Amplification-Based In Vitro Diagnostic Devices for Direct Detection

of Infectious Microorganisms," FDA, July 6, 1993.

- 5. The Center for Biologics Evaluation and Research, FDA, "Points to Consider in the Manufacture and Clinical Evaluation of In Vitro Tests to Detect Antibodies to the Human Immunodeficiency Virus, Type I" (54 FR 48943, November 28, 1989).
- (3) Class III (premarket approval), when:
- (i) The analyte is intended as a component in a test intended for use in the diagnosis of a contagious condition that is highly likely to result in a fatal outcome and prompt, accurate diagnosis offers the opportunity to mitigate the public health impact of the condition (e.g., human immunodeficiency virus (HIV/AIDS)or tuberculosis (TB)); or
- (ii) The analyte is intended as a component in a test intended for use in donor screening for conditions for which FDA has recommended or required testing in order to safeguard the blood supply or establish the safe use of blood and blood products (e.g., tests for hepatitis or tests for identifying blood groups).
- (c) Date of 510(k), or date of PMA or notice of completion of a product development protocol is required. (1) Preamendments ASR's; No effective date has been established for the requirement for premarket approval for the device described in paragraph (b)(3) of this section. See § 864.3.
- (2) For postamendments ASR's; November 23, 1998.
- (d) Restrictions. Restrictions on the sale, distribution and use of ASR's are set forth in §809.30 of this chapter.

[62 FR 62260, Nov. 21, 1997]

EFFECTIVE DATE NOTE: At 62 FR 62260, Nov. 21, 1997, §864.4020 was added to subpart E, effective Nov. 23, 1998.

$\textbf{§864.4400} \quad \textbf{Enzyme preparations.}$

- (a) *Identification*. Enzyme preparations are products that are used in the histopathology laboratory for the following purposes:
- (1) To disaggregate tissues and cells already in established cultures for preparation into subsequent cultures (e.g., trypsin);
- (2) To disaggregate fluid specimens for cytological examination (e.g.,

papain for gastric lavage or trypsin for sputum liquefaction);

- (3) To aid in the selective staining of tissue specimens (e.g., diastase for glycogen determination).
- (b) *Classification*. Class I. These devices are exempt from the premarket notification procedures in subpart E of part 807 of this chapter.

[45 FR 60592, Sept. 12, 1980, as amended at 54 FR 25045, June 12, 1989]

Subpart F—Automated and Semi-Automated Hematology Devices

§864.5200 Automated cell counter.

- (a) Identification. An automated cell counter is a fully-automated or semiautomated device used to count red blood cells, white blood cells, or blood platelets using a sample of the patient's peripheral blood (blood circulating in one of the body's extremities, such as the arm). These devices may also measure hemoglobin or hematocrit and may also calculate or measure one or more of the red cell indices (the erythrocyte mean corpuscular volume, the mean corpuscular hemoglobin, or the mean corpuscular hemoglobin concentration). These devices may use either an electronic particle counting method or an optical counting method.
- (b) *Classification*. Class II (performance standards).

[45 FR 60593, Sept. 12, 1980]

§864.5220 Automated differential cell counter.

- (a) *Identification*. An automated differential cell counter is a device used to identify and classify one or more of the formed elements of the blood.
- (b) *Classification*. (1) Class II (performance standards) when the device is intended to flag or identify specimens containing abnormal blood cells.
- (2) Class III (premarket approval) when the device is intended for other uses, including to count or classify abnormal cells of the blood.
- (c) Date PMA or notice of completion of a PDP is required. No effective date has been established of the requirement for premarket approval for the device